



Best Management Practices (BMPs) for Construction

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BMPs for Construction

- Goal: Retain sediment and other pollutants on site

- Mechanisms:
 - 1. Proper planning
 - 2. Prevent erosion
 - 3. Practice good housekeeping
 - 4. Use structural BMPs as a last defense



1. Site Planning

- Recognize topography, soils, drainage patterns and vegetation at the site
- Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure.
- Avoid construction on steep slopes
- Align temporary and permanent roads and driveways along slope contours



Site Planning – Phase Projects

- Phase grading operations to reduce disturbed areas and time of exposure
- Avoid excavation and grading during wet weather



2. Prevent Erosion

- Divert upland runoff around exposed soil
- Install erosion control devices
- Use soil stabilizers as appropriate
- Use temporary seeding and planting to reduce erosion potential
- Remove existing vegetation only when absolutely necessary
- Roughen or terrace slopes when grading



3. Practice Good Housekeeping

- Construct stabilized access/entrance
- Utilize entrance/exit tire wash
- Use dry sweeping methods where possible
- Filter sediments in process water
- Check sites frequently (prevention)
- Minimize exposure to rain
- Train employees to recognize problems
- Use a concrete washout area



4. Utilize Structural BMPs

- Use structural BMPs to protect inlets, reduce velocity, and settle sediment
- BMPs are widely available and include more than silt fence



Structural BMPs (examples)

- Flow barrier (e.g., silt fence)
- Inlet protection
- Settling (e.g., detention/retention)
- Velocity reduction (e.g., check dam)



Structural BMPs

- EPA Menu of BMPs:
 - www.epa.gov/npdes/menuofbmps
 - http://interests.caes.uga.edu/watershed/epa_bmps.htm



Structural BMPs

- Urban Drainage Criteria Manual
 - <http://www.udfcd.org/>



Sample Checklist:

1. Preserve existing vegetation
2. Divert upland runoff around exposed soil
3. Seed/mulch bare soil
4. Use sediment barriers
5. Protect slopes/channels from gullyng
6. Install sediment traps/basins
7. Preserve vegetation near all waterways

Problem???



Preserving Vegetation



Problem???



Site Stabilization



Problem???



Maintaining Site Entrances



Problem???



Inlet Protection



Inlet Protection



Problem???



Problem???



Dewatering



Problem???



Problem???



Maintaining Slopes



Problem???



Silt Fence – Keyed and Trenched





Contact Information

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